## ABSTRACT OF THE DISCLOSURE

A probe microscope includes a probe and a scanner, the scanner generating
relative motion between a probe and a sample. In addition, a manual input device is
provided to control a separation between a sample and a probe. The detector is used to
generate a signal related to movement of the probe (for example, deflection). Moreover,
the microscope has an alerting device that is responsive to the signal to provide feedback
to an operator, the feedback being indicative of interaction between the sample and the
probe. Preferably, the manual input device is a rotatable knob. Also, the alerting device
is preferably a mechanical resistance device coupled to the knob to provide the feedback
to the user